

FISMA

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Erik Hopkins

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Current FISMA "Framework"

- Agency head responsible for overall information security
- Business owners responsible for assessing and implementing information security
- CIO asserts compliance of business owners
- Independent Evaluation tests CIO assertion
- Congress receives reports from OMB and

FISMA Success Since 2002

- Comprehensive IT governance structure
- Increased focus on information security by senior agency officials
- Directed resources and budget to the CIO office
- Increased percentage of Certification and Accreditation government-wide
- Increased accountability with CIO office

Information Environment Since 2002

- Exponential increase in the number and severity of external attacks both reported and unreported
- Increase in number of insider threats both intentional and unintentional
- Increased sophistication of attacks through means such as social engineering and vulnerable supply chains
- Increased use of mobile devices, uncontrolled points of access, and increasing interconnectivity

Information Security Improvements

2002 versus 2008

- Are we "more secure" now than we were 6 years ago?
- How do we measure "security?"
- How do we prioritize resources to face the evolving threat?
- How can Congress hold agencies accountable?

Problems with FISMA Implementation

- There is a lack of outcome-oriented measures that can be compared over time
- There is little focus on the ability to monitor, respond, and mitigate security incidences
- There is no way to accurately compare security between agencies
- Congress has little insight into agency information security
- Agencies prioritize their own resources based upon Congressional and OMB attention

How Can We Improve the Information Security

Environment

- Improve information security measures
 - Outcome/effectiveness-oriented
 - Measure progress over time
 - Measure ROI
- Prioritize and direct resources against greatest threats
- Incentivize open collaboration
- Treat security holistically- not system by system/ agency by agency

Possible Solutions

- Develop and implement standardized information security measures
- Increase visibility and authority of CIO/CISO over information security
- Standardize independent evaluation
- Breakdown artificial organizational boundaries
- Test agency information security based on intelligence
- Provide decision-makers holistic view of security government-wide.

Partners for Success

- The educated individual
- The responsible business owner
- The empowered CISO
- The informed agency head
- An educated Executive and Legislative branch

Legislative Aspirations

- Increase the resources, quality, and responsibility of the CISOs
- Shift the security paradigm
- Standardize the independent evaluation
- Create a central forum composed of those who are facing the threats every day
- Supplement the CIO assertion and IG evaluation with an operational evaluation
- Require that network service providers and COTS are held to government standards

Questions